

## CLAIMS

1. An equalizer arrangement for generating an output signal by equalizing an input signal, comprising:

at least two mutually interfering first equalizer sections; and

at least two correcting second equalizer sections, wherein each of said second equalizer sections is uniquely associated with an associated one of said first equalizer sections which has the same center frequency, and each of said first and second equalizer sections has an equalization response which at least partially compensates for interference between said first equalizer sections, wherein

each of said second equalizer sections at its center frequency has a gain that is equal to the negative sum of the gain of at least one of the plurality first equalizer sections adjacent to the first equalizer section associated with said associated second equalizer section.

2. The equalizer of claim 1, wherein the gain of one of said certain second equalizer sections is equal to the negative sum of the gains of the first equalizer sections that are immediately adjacent to said first equalizer section that is uniquely associated with said one of said certain section equalizer sections, wherein the gains are taken at the center frequency of said first equalizer section that is uniquely associated with said one of said certain section equalizer sections.

3. The equalizer of claim 1, wherein the gain of said one of said certain second equalizer sections is equal to the negative sum of the gains of the first equalizer sections that are adjacent to said first equalizer section that is uniquely associated with said one of said certain section equalizer

4 sections, wherein the gains are taken at the center frequency of said first equalizer section that is  
5 uniquely associated with said one of said certain section equalizer sections.

1 4. The equalizer of claim 2, wherein said at least two mutually interfering first equalizer  
2 sections arranged in serial and upstream of said at least two correcting second equalizer sections,  
3 wherein said at least two correcting second equalizer sections are also arranged in serial.

1 5. The equalizer of claim 1, wherein said at least two mutually interfering first equalizer  
2 sections, and said at least two correcting second equalizer sections include discrete time domain  
3 filters.

6. The equalizer of claim 1, wherein said at least two mutually interfering first equalizer  
sections, and said at least two correcting second equalizer sections include continuous time domain  
filters.

7. An equalizer that receives an input signal, comprising:

a first equalizer, including a first equalizer section having a gain  $G1$  that receives the input  
signal and provides a first equalizer output signal to a second equalizer section having a center  
frequency  $f2$ , wherein said second equalizer provides a second equalizer output signal to a third  
equalizer section having a gain  $G3$  that provides a third equalizer output signal; and

a second equalizer having a first correcting equalizer section that receives a signal  
indicative of said third equalizer output signal and provides a first correcting equalizer output  
signal to a second correcting equalizer section that provides a second correcting equalizer output

9 signal to a third correcting equalizer output section, which provides a third correcting equalizer  
10 output signal, wherein

11 said second correcting equalizer section includes a gain value that is indicative of the  
12 negative sum of the gains  $G1$  and  $G3$  associated with said first and third equalizer sections at the  
13 center frequency  $f2$  of the second equalizer section.

1 8. The equalizer of claim 7, wherein each of said sections of said first and second equalizers  
2 each includes a bandpass filter.

1 9. An equalizer that receives an input signal, comprising:  
2 a first equalizer, including a first equalizer section having a gain and that receives the input  
3 signal and provides a first equalizer output signal to a second equalizer section having a center  
4 frequency  $f2$ , wherein said second equalizer provides a second equalizer output signal; and  
5 a second equalizer having a first correcting equalizer section that receives a signal  
6 indicative of said second equalizer output signal and provides a first correcting equalizer output  
7 signal to a second correcting equalizer section that provides a second correcting equalizer output  
8 signal, wherein

9 said second correcting equalizer section includes a correction gain value that is indicative of  
10 the negative the gain of said first equalizer section at the center frequency  $f2$  of said second  
11 equalizer section.

1